

# TB CARE I

# **TB CARE I - Mozambique**

Year 2 Quarterly Report July-September 2012

October 30, 2012

### **Quarterly Overview**

| Reporting Country      | Mozambique          |
|------------------------|---------------------|
| Lead Partner           | FHI                 |
| Collaborating Partners | KNCV, MSH           |
| Date Report Sent       | 30-10-2012          |
| From                   | Dario Sacur         |
| То                     | Alfredo McArthur    |
| Reporting Period       | July-September 2012 |

| Technical Areas                 | % Completion |  |  |  |
|---------------------------------|--------------|--|--|--|
| 1. Universal and Early Access   | 100%         |  |  |  |
| 2. Laboratories                 | 75%          |  |  |  |
| 3. Infection Control            | 100%         |  |  |  |
| 4. PMDT                         | 100%         |  |  |  |
| 6. Health Systems Strengthening | 88%          |  |  |  |
| 7. M&E, OR and Surveillance     | 75%          |  |  |  |
| 8. Drug supply and management   | 63%          |  |  |  |

| Overall work plan completion 86% |
|----------------------------------|
|----------------------------------|

#### **Most Significant Achievements**

#### **Universal Access**

This reporting quarter a total of 785 CB DOTS volunteers (254 females and 531 males), 358 traditional healers (176 females and 182 males), and 150 health technicians (35 females and 115 males) were trained. All trained activists since project commencement referred 10,880 TB/Malaria suspects to health facilities. A total of 1893 TB (all forms) were diagnosed of which, 1175 (62 %) were diagnosed as SS+, 667 (35%) as SS-, and 51 (3%) as having TB EP. Of the total TB patients, 445 are TB/HIV positive, representing a co-infection rate of 23% of all referred patients during this quarter. Out of the total number of TB suspects referred by community volunteers, 3995 were diagnosed as having active malaria, representing about 36% of all suspects referred.

The project supported the NTP in reviewing the Pediatric TB manual which will be finalized by end of the year. Pediatric patients and HIV positive were specifically considered during the design of the national algorithm for indication and use of GenExpert.

#### **Laboratories**

A five days training in quality assurance, biosafety, laboratory management and new technologies (GeneXpert, LED microscopy and Line Probe Assay) was conducted to 11 (4 females & 7 males) reference laboratory staff. After the training, work plans for the improvement of the quality of TB laboratory diagnosis were developed.

A total of 1,040 AFB smear microscopy manual were printed and distributed nationwide based on the NTP distribution plan developed. The manual was finalized with support of TB CARE I and the development was as a response to the lack of AFB smear microscopy SOPs in the laboratorry section.

18 LED microscopes procured in APA1 installed in 18 sites, and laboratory technicians from the health facilities where microscopes were allocated have been trained on their use and maintenance. The practical sessions also covered reagent preparation, staining and reading of slides. Distribution was done to TB CARE I geographic areas.

A total of 22 LED microscopes were procured and have been delivered for distribution to improve diagnosis quality and reduce work load for lab staff in TB lab diagnosis.

Training of laboratory technicians in the use and management of the GeneXpert machines was also completed. For GeneXpert management, 15 technicians (4 females and 11 males) from the three sites Gaza, (Hospital de Carmelo), Zambézia (Hospital Provincial de Quelimane) and Niassa (Hospital Rural de Cuamba) were trained.

A draft national genexpert algorithm was developed and approved for pilot use in the country with support from TB CARE I. The pilot test will be for one year and in revisions for its adaptability will be conducted thereafter.

#### **Infection Control**

174 performance evaluation instruments (IMD) were printed to measure implementation of IC activities in four selected provinces. The awaited results will be an increase in number of health units implementing the IC system to improve bio safety and security at work place.

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#### **PMDT**

Several meetings to finalize the PMDT strategy for Mozambique where held at FHI resulting in the finalization of the final draft which was submitted for consultant review and approval by NTP.

#### TB/HIV

Two clinical trainings in TB/HIV were conducted in two TB CARE I provinces of Sofala and Zambezia cofaciltated by NTP provincial supervisors and TB MDR provincial focal points. A total of 60 (22 females and 38 males) MOH health staff attended the trainings. A pre- and post-evaluation test was done to evaluate impact of the training and results of the post evaluation test showed an increase of 45% in TB/HIV coinfection activities as a result of the training. Each participant received a copy of the TB clinical and DR TB diagnostic manuals for reference and exepected results after the training will be an improvement in diagnosis of TB, TB/HIV, pediatric TB and TB MDR in the 2 provinces.

#### **Health Systems Strengthening**

The annual TB CARE I meeting with CB DOTS implementing was conducted where all CB DOTS implementing agencies were represented. The meeting was also attended by NTP Provincial Supervisors from all 7 TB CARE I provinces and Central NTP staff including the NTP manager. The meeting objectives were to evaluate implementation of CB DOTS activities, share challenges, lesson learnt and new implementation strategies to improve and strengthen CB DOTS activities.

In response to the recently held USAID RIG audit recommendations, the TB CARE I project conducted a three days workshop on TB, TB/HIV, MDR TB and Pediatric TB directed to all TB and HIV partners at provincial level. FHI360 staffs from the TB CARE I project, the CHASS Niassa and CHASS SMT projects together with representatives from other partners as JHPIEGO, ICAP, EGPAF, and FGH attended the workshop. CDC, USAID and WHO staffs were also present in the workshop. The workshop was led by TB CARE I technical Officers and NTP Central level staff provide technical support and orientation during the training. Various topics were covered including Pediatric TB and incentives for community volunteers.

#### **Drug Management:**

Training Modules, including the one for Drug Management, were reviewed and finalized. A Training was conducted for TB Provincial Supervisors from Provinces with TB CARE I support. CMAM (Central of Medical Stores) led the training which means the SOPs are in fact institutionalized.

#### Malaria

The Malaria communication strategy has been finalized with support from WHO and the NMCP. The strategy is being translated into portuguese for final signature approval by the minister of health. Printing and reproduction will be done in APA3.

Malaria clinical management trainings were conducted in Cabo Delgado (remaining professionals from the Abril trainings), Tete and Manica provinces. A total of 983 (422 Females and 561 Males) clinicians were trained, being 136; 450 and 399 from the three provinces respectivelly.

#### Other activities:

Two TB CARE I staff attended a leadership and conflict management training course organized within FHI in Maputo. The training was a replica of the Dar Es Salaam leadership training where 2 FHI360 Mozambique staff participated as ToTs.

#### Overall work plan implementation status

Project implementation status is now at 86%.

#### Technical and administrative challenges

Given the delay in the APA2 work plan and budget, activities planned posed a challenge to be implemented given the short period of time, forcing the project team to cancel and revise most of these under the three activity modifications trackers approved by PMU and USAID. This affected planning process as change in activities would require new planning and stakeholder involvement. The team for APA3 is determined to have the workplan and budget approved in time to avoid these constraints.

Procurement still poses a challenge as the process takes longer than planned due to delay in approval process. Lesson learnt for APA3 will be to initiate all procurement as the start of the budget year as to avoid reporting of accrual funds at the end of each reporting quarter.

The malaria trainings still poses a challenge as huge amounts of funds are moved to support logisitcs without adequate security. In one province the use of a private security firm was tried but it did not yield the intended results.

#### **In-country Global Fund status and update**

Global Fund (GF) has disbursed funds for the purchase of first and second line drugs. The funds disbursed were from last year and this year funds will be disbursed next year for the purchase of drugs also. The transitional funds mechanism proposal has been approved under category three for Mozambique. Technical support in the development of the proposal was provided by the TB CARE I project through a KNCV based consultant (Dr. Bert Schreuder). The proposal also is to cover the procurement of drugs for TB. Currently the team is finalizing minor adjustments on the proposal as requested by GF.

# **Quarterly Technical Outcome Report**

| Technical Area  | chnical Area 1. Universal and Early Access  |                      |      |                      |      |        |  |  |
|---|---|----------------------|------|----------------------|------|--------|--|--|
| Expected  | Outcome Indicators  | Baselir              |      | Targe                |      | Result | Highlights of the Quarter  | Challenges and Next Steps to   |
| Outcomes  |   | Data                 | Year | Data                 | Year | Y2     |  | Reach the Target   |
| demand for and use of high quality TB services and improve the satisfaction with TB services provided (Population/Patie nt Centered Approach) | 1.1.1 Updated information available on the quality of services from a patients' perspective | No                   | 2010 | Yes                  | 2012 | Yes    | The piloting of patient centered approach (PCA) tools was conducted in two selected districts of Nampula and Chibuto with the core team leading the process for two weeks. The Implementation methodology consisted of training health facility nurses, community based volunteers and staff of CB DOTS implementing agency (IAs) to lead the dissemination and distribution of PCA materials in selected health facilities and communities. A total of 12 nurses, 26 CB DOTS volunteers and 3 IAs were trained from a total 7 health facilitators. A total of 2,280 patient charters copies, 36 TB literacy booklets, 36 teaching aids (Story of Thomas), 18 quote TB light booklets and 12 sets of Quote TB pictogramas were distributed to be used by volunteers and health technicians in disseminating PCA information and the patient charters to TB patients. |  |
| quality of TB<br>services delivered<br>among all care<br>providers  | 1.2.4 CB-DOTS program is implemented  | 3                    | 2011 | 3                    | 2012 | 3      | Friends in Global Health (FGH) closed activities in Zambezia province affecting implementation of CB DOTS activities in 3 districts.   | TB CARE I will cover 2 of the FGH districts after NTP has requested for continued CB DOTS implementation |
| (Supply)  | 1.2.4 CB-DOTS program is implemented  | 44 (36 TB<br>CARE I) | 2011 | 53 (TB CARE<br>I 45) | 2012 | 45     | All 45 districts covered with CB DOTS implementation through partnerships with local and international implementing agencies   | Increase 5 more districts in APA3  |

| Technical Area | 2. Laboratories    |          |      |        |      |        |                           |                              |
|----------------|--------------------|----------|------|--------|------|--------|---------------------------|------------------------------|
| Expected       | Outcome Indicators | Baseline |      | Target |      | Result | Highlights of the Quarter | Challenges and Next Steps to |
| Outcomes       |                    |          | Year | Data   | Year | Y2     |                           | Reach the Target             |

| 2.1 Ensured capacity, availability and quality of laboratory testing in country needed to support the diagnosis and monitoring of TB patients | 2.1.3 Number of labs providing quality assured TB laboratory services for diagnosis and monitoring of TB patients to support the NTP Quality laboratory services are defined as following pre-defined global set standards of laboratory procedures and practices. The procedures and practices must follow the Quality Assurance Cycle which is following proper management and analysis of specimens, Bio safety procedures, proper registering and validation of results in order to be accurate and reliable.  Indicator value: Yes/No Level: National and TB CARE geographic areas Means of Verification: Supervision reports | 0    | 2011 | 57/114<br>(50% of<br>labs in TB<br>CARE I<br>target<br>provinces) | 2012 | 72/114<br>(63%) | 15 districts visited, 9 in Gaza and 6 in Tete   | Increase number of laboratories and districts to be visited in APA3  |
|---|--|------|------|---|------|-----------------|---|--|
| 2.2 Ensured the availability and quality of technical assistance and services   | 2.2.3 Number of technical assistance visits to TB Reference labs in country to strengthen and build capacity of the labs.  | None | 2011 | 5   | 2012 | 1               | A team composed of TB CARE I laboratory officer and MSH laboratory consultant visited Zambézia province to conduct an assessment of the situation of AFB smear microscopy. As part of the visit, the team; 1) verified the current peripheral laboratory network situation for the diagnosis of TB including nurses trained in AFB smear microscopy, 2) conducted a site visit to the provincial laboratory to assist in the identification of a suitable room for the placement of GeneXpert machine, and 3) worked together with the provincial QA officer (who is also the head of the microbiology unit and the deputy provincial supervisor) in conducting a needs assessment of the current situation of the peripheral microscopy network. The assessment focussed on the following areas: availability of infrastructure, SOPs and commodities. |  |
|   | 2.2.3 Number of recommendations implemented to improve malaria activities Description: Activities improved based on supervision report recommendations. Indicator value: Number Level: National, provincial, district Means of verification: supervision reports   | 0    | 2011 | 3   | 2012 | 0               | N/A   | The NMCP head was changed in the beggining of the quarter and the coming head changed all previously approved plans affecting the clinical supervision. Activity has been included in the APA2 carry over MOT. |

|                    |  | ı             |      | ı             |      | ı             | 1   |                                   |
|--------------------|--|---------------|------|---------------|------|---------------|---|-----------------------------------|
| 2.3 Ensured        | 2.3.1 Number of labs using new technologies            | 1. TB         | 2011 | 1. TB         | 2012 | 1. TB         | 22 LED microscopes procured this reporting      | 15 more LED microscopies will be  |
| optimal use of     |  | culture: 2    |      | culture: 2 (1 |      | `             | period. A distribution plan was elaborated by   | purchased in APA3. The activity   |
| new approaches     |  | (1 central;   |      | central; 1    |      | central; 1    | NTP in close coordination with TB CARE I. The   | was approved in the APA2 MOT      |
| to the laboratory  |  | 1 regional)   |      | regional)     |      | regional)     | •   | but transitioned to APA3          |
| confirmation of    |  | 2. First line |      | 2. First line |      | 2. First line | lab technicians from the sites where the        |                                   |
| TB and             |  | DST: 2 (1     |      | DST: 2 (1     |      | DST: 2 (1     | equipment will be installed will be trained in  |                                   |
| incorporation in   |  | central; 1    |      | central; 1    |      | central; 1    | use and management of LED micrscopes. The       |                                   |
| national strategic |  | regional)     |      | regional)     |      | regional)     | objective is to improve quality of TB diagnosed |                                   |
| lab plans          |  | 3. Second-    |      | 3. Second-    |      | 3. Second-    |   |                                   |
|                    |  | line DST: 0   |      | line DST: 0   |      | line DST: 0   |   |                                   |
|                    |  | 4. HAIN       |      | 4. HAIN       |      | 4. HAIN       |   |                                   |
|                    |  | MTBDRplus:    |      | MTBDRplus:    |      | MTBDRplus:    |   |                                   |
|                    |  | 0             |      | 0             |      | 0             |   |                                   |
|                    |  | 5.            |      | 5.            |      | 5.            |   |                                   |
|                    |  | GeneXpert:    |      | GeneXpert:    |      | GeneXpert:    |   |                                   |
|                    |  | 4; LED        |      | 9 (1 central, |      | 9 (1 central, |   |                                   |
|                    |  | microscopy:   |      | 2 Provincial, |      | 2 Provincial, |   |                                   |
|                    |  | 0 ' '         |      | 6 district)   |      | 6 district)   |   |                                   |
|                    |  |               |      | LED           |      | LED           |   |                                   |
|                    |  |               |      | microscopy:   |      | microscopy:   |   |                                   |
|                    |  |               |      | 20 (district) |      | 40 (district) |   |                                   |
|                    |  |               |      | (,            |      | (4.24.123)    |   |                                   |
|                    | 2.3.2 Number of laboratories offering rapid tests      | 5.            | 2011 | 5.            | 2012 | 9             | The 2 Canalynamia have been installed in        | Algorithm for GeneXpert finalized |
|                    | 3 .  | _             | 2011 | _             | 2012 | 9             | The 3 GeneXperts have been installed in         | ,                                 |
|                    | for TB or drug-resistant TB                            | GeneXpert:    |      | GeneXpert:    |      |               | Niassa, Zambezia and Gaza and lab               | and approved for piloting         |
|                    |  | 4             |      | 9             |      |               | technicians from the sites trained in use and   | purposes.                         |
|                    |  |               |      |               |      |               | management of the equipment.                    |                                   |
|                    |  |               |      |               |      |               |   |                                   |
|                    | 2.3.3 Number of rapid tests conducted                  | GeneXpert:    | 2011 | GeneXpert:    | 2012 | 0             | N/A   | Training of lab technicians       |
|                    |  | x national,   |      | x national,   |      |               |   | concluded in September and data   |
|                    |  | (0 TB         |      | (100 TB       |      |               |   | reporting will commence soon      |
|                    |  | CARE)         |      | CARE)         |      |               |   | after                             |
| 2.4 Ensured        | 2.4.1 Number and percent of labs providing             | 9             | 2011 | 82 (40% of    | 2012 | 0             | Clinicians in 3 provinces of Cabo Delgado, Tete | The QA guidelines are still to be |
| capacity,          | quality assured malaria laboratory services for        | 9             | 2011 | total labs)   | 2012 |               | and Manica trained.                             | printed, disseminated and         |
| availability and   | , ,  |               |      | total labs)   |      |               | and Mariica d'airied.                           | distributed. The activity will be |
| quality of         | diagnosis Description: Quality laboratory services are |               |      |               |      |               |   |                                   |
|                    |  |               |      |               |      |               |   | completed in APA3                 |
|                    | defined as following pre-defined global set            |               |      |               |      |               |   |                                   |
| in country         | standards of laboratory procedures and practices.      |               |      |               |      |               |   |                                   |
| needed to          | The procedures and practices must follow the           |               |      |               |      |               |   |                                   |
| support the        | Quality Assurance Cycle which is following proper      |               |      |               |      |               |   |                                   |
| diagnosis of       | management and analysis of specimens, Bio              |               |      |               |      |               |   |                                   |
| malaria            | safety procedures, proper registering and              |               |      |               |      |               |   |                                   |
|                    | validation of results in order to be accurate and      |               |      |               |      |               |   |                                   |
|                    | reliable.  |               |      |               |      |               |   |                                   |
|                    | Indicator value: Number and percent                    |               |      |               |      |               |   |                                   |
|                    | Level: national, provincial, district                  |               |      |               |      |               |   |                                   |
|                    | Means of Verification: Supervision reports             |               |      |               |      |               |   |                                   |

| 2.4.2 Number and percent of labs reporting a stock out of malaria commodities  Description: Number/percent of labs that | N/A | 2011 | 20 (10% of total labs) | 2012 | • | 500,000 lab slides procured and distributed including reagents. | More consumables and reagents in process of being purchased and will be distributed nationwide |
|---|-----|------|------------------------|------|---|---|--|
| reported malaria consumable stock outs within   |     |      |                        |      |   |   | will be distributed flationiwide   |
| the last 3 months. Indicator: Number and percent  |     |      |                        |      |   |   |  |
| Level: National, provincial, district Means of verification: Supervision reports  |     |      |                        |      |   |   |  |
| Numerator: # of labs that report a stock out of malaria consumables in the last 3 months                                |     |      |                        |      |   |   |  |
| Denominator: Number of labs that conduct  |     |      |                        |      |   |   |  |
| malaria services  |     |      |                        |      |   |   |  |

| Expected  | Outcome Indicators  | Baselir | ie   | Target |      | Result | Highlights of the Quarter   | Challenges and Next Steps to |
|---|---|---------|------|--------|------|--------|---|------------------------------|
| Outcomes  |   | Data    | Year | Data   | Year | Y2     |   | Reach the Target             |
| .3 Strengthened<br>B IC Monitoring<br>Measurement | 3.3.2 Number of TB IC checklists produced and distributed | 0       | 2011 | 1000   | 2012 |        | Copies of the performance evaluation tool have been produced and distributed to measure IC activities |                              |

| Technical Are  | 4. PMDT                                       |         |      |       |      |        |     |                           |                                     |
|----------------|---|---------|------|-------|------|--------|-----|---------------------------|-------------------------------------|
| Expected       | Outcome Indicators                            | Baselin | e    | Targe | t    | Result |     | Highlights of the Quarter | Challenges and Next Steps to        |
| Outcomes       |   | Data    | Year | Data  | Year | Y2     |     |                           | Reach the Target                    |
|                |   |         |      |       |      |        |     |                           |                                     |
| 4.1 Improved   | 4.1.4 Percent of MDR TB patients who have     | 43      | 2010 | 50    | 2011 | 0      | N/A |                           | The data collection system is being |
| treatment      | completed the full course of MDR TB treatment |         |      |       |      |        |     |                           | stregthened through a consultant    |
| success of MDR | regimen and have a negative sputum culture.   |         |      |       |      |        |     |                           | contracted in APA2.                 |
|                |   |         |      |       |      |        |     |                           |                                     |

| Expected  | Outcome Indicators   | Baselir   | ie   | Targe   | t    | Result                                    | Highlights of the Quarter  | Challenges and Next Steps to   |
|---|--|---|------|---|------|---|--|--|
| Outcomes  |  | Data  | Year | Data  | Year | Y2  |  | Reach the Target   |
| 6.1 Ensured that TB control is embedded as a priority within the national health strategies and plans, with commensurate domestic financing and supported by the engagement of partners       | 6.1.1 TB care and control strategic plan embedded within national health strategies, including quantifiable indicators and budget allocations  | No  | 2011 | Yes   | 2012 | Yes                                       | Contract signed with the consultants to conclude the Costing and M & E framework. Work is already in progress  | The missing components will be finalized by November and the plan will be availbale for approval by January 2013 |
| 6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) formed integral part of national plans, strategies and service delivery of these components | 6.2.4 Supervisory visits conducted according to country supervisory standards Indicator Value: Percent Numerator: Number of annual supervisory visits conducted disaggregated by three levels. Denominator: Number of annual supervisory visits planned disaggregated by three levels. | Central:<br>36% (8/22)<br>Provincial:<br>3% (8/256)<br>District: NA | 2011 | Central: 50% (11/22) Provincial: 47% (120/256) District: NA | 2012 | Central<br>18/22<br>Provincial<br>143/256 | Two field visits were conducted to Manica and Sofala provinces to supervise CB DOTS activities being implemented by ADPP. A total of 7 districts (3 in Sofala and 4 in Manica) visited. The visits was integrated with NTP district supervisors and CHASS SMT as a way of strengthening project activities across FHI360 Mozambique projects. Immediate results of the visits were the conduct of an activity re-planning exercise to respond to needs at district levels related to CB DOTS, development of an in-service training plan for peripheral health staff, community supervisors, field officials and community volunteers. A debriefing meeting in both provinces was held at DPS with all relevant members. | One visit to one TB CARE I province of Gaza be conducted in October 2012   |

| Technical Are  | 7. M&E, OR and Surveillance   |        |      |   |      |        |   |  |
|--|---|--------|------|---|------|--------|---|--|
| Expected   | Outcome Indicators  | Baseli | ne   | Targe   | t    | Result | Highlights of the Quarter   | Challenges and Next Steps to   |
| Outcomes   |   | Data   | Year | Data  | Year | Y2     |   | Reach the Target   |
| 7.2 Improved capacity of NTPs to analyze and use quality data for management of the TB program | 7.2.2 NTP provides regular feedback from systematic analysis of surveillance and programmatic data and related recommendations by central to lower levels | 0      | 2011 | 11  | 2012 | 11     | TB CARE I M & E Officer provides support to the NTP by sitting one day a week and providing technical assistance when needed. | Continued support in M & E technical assistance to the NTP by WHO NPO Officer and TB CARE I FHI360 M & E Officer.                              |
| 7.3 Improved<br>capacity of NTPs<br>to perform<br>operational<br>research                      | 7.3.1 Number of surveillance studies completed and results incorporated into national policy/guidelines   | 0      | 2011 | Out of 4<br>total studies<br>underway,<br>target to<br>complete: 2;<br>results to be<br>incorporated<br>: 0 |      | 0      | N/A   | All studies have been cancelled to APA3. The KAP protocol was revised by and the project is still working on the comments pending its approval |

| Technical Are   | 8. Drug supply and management   |         |      |       |      |        |   |                              |
|---|---|---------|------|-------|------|--------|---|------------------------------|
| Expected  | Outcome Indicators  | Baseliı | ne   | Targe | t    | Result | Highlights of the Quarter   | Challenges and Next Steps to |
| Outcomes  |   | Data    | Year | Data  | Year | Y2     |   | Reach the Target             |
| 8.1 Ensured<br>nationwide<br>systems for a<br>sustainable | 8.1.1 Quarterly national stock information available  | No      | 2011 | Yes   | 2012 | Yes    | A follow up training was conducted for TB<br>Provincial Supervisors from Provinces with TB<br>CARE I support in the use of LMIS |                              |
| supply of anti-TB<br>drugs                                | 8.1.2 Updated SOPs for selection, quantification, procurement, and management of TB medicines available | No      | 2011 | Yes   | 2012 | No     | Logistics and Management Information System (LMIS) review done.   |                              |

# **Quarterly Activity Plan Report**

| 1. Univers  | sal and                | Early Access   |      |           |                          | Plan<br>Comp |      |  |
|---|------------------------|--|------|-----------|--------------------------|--------------|------|--|
| Outcome   | Activity<br>#          | Activity   |      | d Budget  | Cumulative<br>Completion | Month        |      | Cumulative Progress and Deliverables up-<br>to-date  |
| 1.1 Increased demand for and use of                               | 1.1.1                  | ACSM workshop  | KNCV | 54.355    | 100%                     | Jul          |      | 3 regional workshops conducted. A total of 87 participants (Female 21 and Males 61) were present   |
| high quality<br>TB services<br>and improve<br>the<br>satisfaction | 1.1.2                  | IEC materials developed for TB   | FHI  | 38.970    | Cancelled                | Sep          |      | IEC materials to be developed were related to ACSM and since the national strategy has not been completed, the project revised this activity in its APA2 MOT to reflect IEC for TB/HIV.        |
| with TB<br>services<br>provided                                   | 1.1.2<br>(APA2<br>MOT) | IEC materials produced   | FHI  | 38.970    | 100%                     | Sep          | 2012 | Activity modified from ACSM to printing of TB/HIV exisitng leaflets and PCA materials.   |
| (Population/P<br>atient<br>Centered<br>Approach)                  | 1.1.3                  | IEC materials developed for malaria  | FHI  | 103.920   | Cancelled                | Sep          | 2012 | Activity transited to APA3 through the APA2 trasition MOT. To date the materials have been finalized in close coordination with WHO and NMCP and are currently being translated to portuguese. |
|   | 1.1.4                  | Malaria day and other awareness activities   | FHI  | 12.990    | 100%                     | Apr          | 2012 | completed  |
|   | 1.1.5                  | TB Day commoration and other awareness activities  | FHI  | 11.353    | 100%                     | Apr          | 2012 | completed  |
| Outcome   | Activity<br>#          | Activity   | _    |           | Cumulative Completion    | Month        | Year | Cumulative Progress and Deliverables up-<br>to-date  |
| 1.2 Increased quality of TB                                       | 1.2.1                  | CB-DOTS expansion  | FHI  | 1.412.325 | 100%                     | Sep          | 2012 | All 45 districts covered with CB DOTS implementation.  |
| services<br>delivered   | 1.2.2                  | Training workshops in diagnostic skills for malaria  | FHI  | 65.210    | 100%                     | Jun          | 2012 | Completed  |
| among all<br>care<br>providers<br>(Supply)                        | -                      | Training workshops in diagnostic skills for<br>malaria (complete Cabo Delgado; Manica<br>and Tete) | FHI  | 236.137   | 100%                     | Sep          | 2012 | Remaining 134 (56 females & 78 males)<br>trained in Cabo Delgado, Manica 399 (168<br>females & 231 males) and Tete 450 (198<br>females & 252 males)  |

| 1.2.3.1 TB/MDR/HIV training workshop  (APA2 MOT)  TB/MDR/HIV training workshop  FHI 40.970  Cancelled Sep 2012 Training openings were filled up before TB CARE I registered NTP participants. Plan is to register for April 2013 slots. | 1.2.3 | TB/MDR/HIV training course   | FHI | 69.938 | Cancelled | Sep | Activity cancelled and funds modified to support NTP staff participation in the Sondalo training and contracting of one consultant to translate and adapt the training for Mozambique |
|---|-------|------------------------------|-----|--------|-----------|-----|---|
|   | (APA2 | TB/MDR/HIV training workshop | FHI | 40.970 | Cancelled | Sep | CARE I registered NTP participants. Plan is to  |

| 2. Laborat                           | tories   |   |        |          |             | Plan<br>Comp |      |   |
|--------------------------------------|----------|---|--------|----------|-------------|--------------|------|---|
| Outcome                              | Activity | Activity  | •      | Approve  |             | Month        | Year |   |
|                                      | #        |   | Leader | d Budget | Completion  |              |      |   |
| 2.1 Ensured capacity, availability   | 2.1.1    | Training of lab technicians in QA, biosafety, lab management and new technologies (LED, GeneXpert and line probe assay) | FHI    | 40.925   | 100%        | Aug          |      | 11 lab technicians from the 3 RL trained in QA, bio safety, lab management and new technologies           |
| and quality of laboratory testing in | 2.1.2    | Reference labs function   | FHI    | 40.485   | <b>5</b> 0% | Sep          |      | 50% payment done to suppliers and the remaning 50% to be done upon delivery which is expected this month. |
| country needed to support the        |          | Supervision of central, provincial and district level staff (malaria)   | FHI    | 15.585   | <b>2</b> 5% | Sep          |      | The supervision plan for Cabo Delgado and Tete has been elaborated and approved for November 2012.        |

| monitoring of<br>TB patients | 2.1.4                   | Supervision of provincial and district level staff (TB)                    | FHI | 22.187 | 100%                  | Sep   |      | Integrated laboratory supervision and technical assistance visits were conducted in 2 TB CARE I provinces (Tete and Gaza provinces). Overall, 15 laboratories were visited (9 in Gaza and 6 in Tete). The main findings were poor reagent and supply management, sample registry with errors, staff not following correctly AFB smear microscopy technical procedures, inadequate infrastructure, lack of refreshment courses in AFB smear microscopy and unavailability of SOPs. Several recommendations and technical assistance were given to the team in order to improve the quality of TB diagnosis. The recommendations included the improvement of sample registering, technical procedures, stock management and good laboratory practices. The team also provided TA on the filling in sample registry, good laboratory practices for AFB smear microscopy and stock management. Furthermore, AFB microscopy manuals have been distributed to all the laboratories to fill the gap of lack of SOPs. Follow up visits will be conducted to ascertain that recommendations are being implemented and followed. |
|------------------------------|-------------------------|--|-----|--------|-----------------------|-------|------|--|
|                              | 2.1.5                   | National lab meeting (malaria)   | FHI | 25.772 | <b>1</b> 00%          | mar   |      | Completed  |
|                              | 2.1.6                   | Training of lab technicians (malaria)                                      | FHI | 6.495  | Cancelled             | Dec   | 2012 | Activity transited to APA3. The project is waiting for approval of Manhiça CISM training visit approval  |
|                              | 2.1.9<br>(APA 2<br>MOT) | 15 lab technicians trained in new technologies including GeneXpert and LED | FHI | 6.000  | 100%                  | Sep   | 2012 | 33 laboratory technicians trained (18 LED and 15 GeneXperts). Activity approved in the APA2 MOT  |
| Outcome                      | Activity<br>#           | Activity   |     |        | Cumulative Completion | Month | Year | Cumulative Progress and Deliverables up-<br>to-date  |

| 2.2 Ensured<br>the<br>availability<br>and quality of<br>technical<br>assistance<br>and services | 2.2.1         | TA for reference labs Provide TA on TB culture, DST and introduction of new technologies | MSH | 33.990  | 100%                  | Sep   |      | Two MSH consultants provided TA visits to reference laboratories (Grace Kahenya and Maria Alice Telles) in August for 2 weeks. The objective of the visits were to train lab staff based in the 3 reference labs in Bio Safety, Quality assurance and lab management. As part of the visit, an assessment of the peripheral lab network system was conducted to assess the quality of AFB smear microscopy in order to design a quality improvement plan. |
|---|---------------|--|-----|---------|-----------------------|-------|------|---|
|   | 2.2.2         | Procurement of lab materials and consumables (malaria)                                   | FHI | 319.554 | 75%                   | Sep   |      | 22 LED microscopes purchased, 500,000 slides have been procured and distributed to all 11 provinces. Payments completed for the supply of the remaining consumables   |
|   | 2.2.3         | Establish a QA system for malaria and TB   | FHI | 169.247 | Cancelled             |       |      | Activity cancelled and included in MoT  |
| Outcome   | Activity<br># | Activity   |     |         | Cumulative Completion | Month | Year | Cumulative Progress and Deliverables up-<br>to-date   |
| 2.3 Ensured optimal use of new approaches to the laboratory                                     | 2.3.1         | Guidelines for QA for TB   | FHI | 25.980  |                       | Dec   | 2012 | 1,040 copies of the AFB smear microscopy manual have been printed and distributed nationwide. QA and Biosafety manuals to be finalized and printed in APA3 (activity transitioned to APA3)  |
| confirmation<br>of TB and<br>incorporation<br>in national<br>strategic lab                      | 2.3.2         | Guidelines for QA for malaria  | FHI | 51.960  | 50%                   | Sep   | 2012 | QA for malaria waiting for final approval from<br>MOH   |

75%

| 3. Infection  | on Cont  | rol          |          |          |            | Plan<br>Comp |      |  |
|---|----------|--------------|----------|----------|------------|--------------|------|--|
| Outcome   | Activity | Activity     | Activity | Approve  | Cumulative | Month        | Year | Cumulative Progress and Deliverables up-   |
|   | #        |              | Leader   | d Budget | Completion |              |      | to-date  |
| 3.3<br>Strengthened<br>TB IC<br>Monitoring &<br>Measurement |          | IC checklist | FHI      | 1.949    | 100%       | Aug          |      | 174 peformance evaluation tools printed and distributed to measure IC activities |

| 4. PMDT                |            |  |     |          |                          | Plan<br>Comp |      |  |
|------------------------|------------|--|-----|----------|--------------------------|--------------|------|--|
| Outcome                | Activity # | Activity   |     | d Budget | Cumulative<br>Completion |              |      | Cumulative Progress and Deliverables up-<br>to-date  |
| 4.1 Improved treatment | 4.1.1      | MDR guidelines and forms                           | FHI | 76.217   | 100%                     | Aug          | 2012 | 1000 guidelines printed and distributed nationwide   |
| success of MDR         | 4.1.2      | Pre-service training in MDR                        | FHI | 7.669    | Cancelled                | Aug          | 2012 | Activity cancelled and carried over to APA3 through the APA2 transition MOT  |
|                        | 4.1.3      | Surveillance system for health workers on TB / MDR | FHI | 34.488   | ■ 100%<br>■ 100%         | Jul          | 2012 | A two days workshop was conducted with NTP and main TB hospitals representatives in country as a step to establish a surveillance system on TB and TB MDR. This workshop counted with the participation of high level staff from MoH including the National Deputy Director for Public Health, NTP Manager and National Medical Safety representative. MOH staffs from provincial TB hospitals in Beira, Nampula and Maputo also attended the workshop. Objectives of the workshop included but not limited to health work regular consultation and TB screening for all health staff. As result of this workshop, each province developed an action plan of TB and MDR TB surveillance system to be implemented in each province. The implementation will be in phases and is going to start within the main TB units |

6. Health Systems Strengthening Planned Completion Month Year Cumulative Progress and Deliverables up-**Activity Approve Cumulative** Outcome Activity Activity Leader d Budget Completion # to-date Workshop Strategic Plan NTP 71.634 75% 6.1 Ensured 6.1.1 Sep 2012 Workshop not conducted as the project is still FHI that TB working on the finalization of the NTP control is Strategic Plan budget and M & E Framework embedded as Printing of National Malaria tools (malaria) FHI **12.990** 100% 2012 400 copies each for Malaria Policy, Malaria 6.1.2 Sep a priority Strategic plan and M & E in process of within the conclusion national Activity Activity **Activity Approve Cumulative** Month Year Cumulative Progress and Deliverables up-Outcome Leader d Budget Completion to-date

| 6.2 TB control components (drug supply and                                   | 6.2.1          | National TB meeting  | FHI        | 27.409          | Cancelled | Sep        |      | The meeting was cancelled since the planned activity coincided with the National Malaria meeting which has MOH provincial heads had to participate in also. The TB meeting has been pushed to February 2013 |
|--|----------------|--|------------|-----------------|-----------|------------|------|---|
| management,<br>laboratories,<br>community<br>care, HRD<br>and M&E)<br>formed | 6.2.2<br>6.2.3 | National malaria meeting Training workshop TB CARE partners and stakeholders | FHI<br>FHI | 41.461<br>4.547 |           | Sep<br>Sep |      | Completed The TB CARE I annual meeting was conducted with all CB DOTS implementing partners representatives, NTP provincial supervisors and NTP central level staff.  |
| integral part of national plans, strategies                                  | 6.2.4          | Provincial workshops   | FHI        | 21.011          | 50%       | Aug        | 2012 | A total of 60 (38 male and 22 females)MOH provincial clinicians trained in TB/HIV management in 2 provinces of Zambezia and Sofala.   |
| and service<br>delivery of<br>these<br>components                            | 6.2.5          | Participation in Int. Events   | FHI        | 54.421          | 100%      | Sep        | 2012 | 2 FHI360 staff participated in the leadership training in Dar Es Salaam, M & E Officer in GIS Nairobi Training, COP Hague trainings and Kuala Lumpur; Lab Officer_Nairobi GeneXpert training                |
|  | 6.2.6          | Supervision central  | FHI        | 76.511          | 75%       | Sep        | 2012 | 6 provinces completed and Gaza to be completed in October 2012. Gaza visit  |
|  | 6.2.7          | Provincial supervision   | FHI        | 29.422          | 100%      | Aug        | 2012 | 7 TB CARE I provinces visited by TB CARE I staff  |
|  | 6.2.8          | District supervision   | FHI        | 129.950         | 75%       | Aug        | 2012 | Payment completed, awaiting supplier handover   |
|  | 6.2.9          | Improved diagnosis of TB/HIV conifection                                     | FHI        | 19.836          | 100%      | Sep        | 2012 | 2 days training workshop conducted for CHASS Niassa project staff, TB CARE I PO and implementing partners   |

| 7. M&E, O    | R and S  | Surveillance                     |        |          |             | Plan<br>Comp |      |  |
|--------------|----------|----------------------------------|--------|----------|-------------|--------------|------|--|
| Outcome      | Activity | Activity                         | •      | • •      |             | Month        | Year | Cumulative Progress and Deliverables up-       |
|              | #        |                                  | Leader | d Budget | Completion  |              |      | to-date  |
| 7.2 Improved | 7.2.1    | M&E supervision visits (malaria) | FHI    | 38.061   | Cancelled   | Sep          | 2013 | Activity cancelled and included in the APA2    |
| capacity of  |          |                                  |        |          |             |              |      | carry over MOT                                 |
| NTPs to      | 7.2.2    | Contract M&E officer (malaria)   | FHI    |          | <b>2</b> 5% | Mar          | 2013 | The M & E officer position is pending decision |
| analyze and  |          |                                  |        |          |             |              |      | of the National Public Health head.            |
| use quality  |          |                                  |        |          |             |              |      |  |
| data for     |          |                                  |        |          |             |              |      |  |
| management   |          |                                  |        |          |             |              |      |  |

| of the TB<br>program                             | 7.2.3.1                 | Data clerk contracted to support the NMCP M & E department | FHI        | 9.800           | <b>1</b> 00%                  | Jun        | 2012 | Data clerk contracted and executing functions  |
|--|-------------------------|--|------------|-----------------|-------------------------------|------------|------|--|
|  | 7.3.4<br>(APA2<br>MOT)  | Conduct an MDR TB evaluation study                         | FHI        | 14.000          | 100%                          | Sep        | 2012 | TB CARE I provided technical and financial support to a CDC-led assessment of MDR-TB notified patients from 2007 till 2011. The purpose of the assessment was to verify registry information about case management and treatment results to be used in the development of the PMDT National Strategy |
| Outcome  | Activity                | Activity   | Activity   | Approve         | Cumulative                    | Month      | Year | Cumulative Progress and Deliverables up-   |
|  |                         |  |            |                 |                               |            |      |  |
|  | #                       |  | Leader     | d Budget        | Completion                    |            |      | to-date  |
| 7.3 Improved capacity of                         |                         | CE study CB-DOTS   | FHI        | 19.485          |                               | Sep        | 2013 | Activity cancelled and included in the APA2 carry over MOT   |
| •  |                         | CE study CB-DOTS  New technologies studies                 |            |                 | Cancelled                     | Sep<br>Jun |      | Activity cancelled and included in the APA2  |
| capacity of<br>NTPs to                           | 7.3.1                   |  | FHI        | 19.485          | Cancelled Cancelled           | ·          | 2013 | Activity cancelled and included in the APA2 carry over MOT Activity cancelled and included in the APA2   |
| capacity of<br>NTPs to<br>perform<br>operational | 7.3.1<br>7.3.2<br>7.3.3 | New technologies studies                                   | FHI<br>FHI | 19.485<br>6.495 | Cancelled Cancelled Cancelled | Jun        | 2013 | Activity cancelled and included in the APA2 carry over MOT Activity cancelled and included in the APA2 carry over MOT Included in the APA2 carry over MoT  |

8. Drug supply and management Planned Completion Activity Activity **Activity | Approve | Cumulative** Month Year Cumulative Progress and Deliverables up-Outcome Leader d Budget Completion # to-date Establish a system for quality control of Included in the APA2 carry over MoT 8.1 Ensured 8.1.1 FHI 129.464 Cancelled Sep 2012 nationwide drugs (malaria) submitted to PMU 2012 Included in the APA2 carry over MoT 8.1.2 Strengthen the pharmacovigilance system FHI 38.970 Cancelled systems for a Sep and rational use of drugs (malaria) submitted to PMU sustainable supply of anti-Provision of TA to improve drug **34.302 100%** 8.1.3 MSH Sep 2012 completed TB drugs management (forecasting, procurement, warehousing, distribution and LMIS) 25% Establish a system for quality control of MSH 11.464 2012 Activity plan was developed to be used in the 8.1.4 Aug drugs (TB) developmenty of the quality control of drugs. Strengthen the pharmacovigilance system 2012 Activity cancelled and included in the APA2 8.1.5 MSH 35.118 Cancelled Aug and rational use of drugs (TB) transitional plan 63%

# **Quarterly MDR-TB Report**

| Country Mozambique | Period | JULY-SEPTEMBER 2012 |
|--------------------|--------|---------------------|
|--------------------|--------|---------------------|

## MDR TB cases diagnosed and put on treatment in country

| Quarter         | Number of MDR cases diagnosed | Number of MDR cases put on |
|-----------------|-------------------------------|----------------------------|
| Jan-Dec 2010    | 165                           | 86                         |
| Jan-Sep 2011    |                               |                            |
| Oct-Dec 2011    |                               |                            |
| Total 2011      | 184                           | 146                        |
| Jan-Mar 2012    | 21                            | 21                         |
| Apr-Jun 2012    | 58                            | 58                         |
| Jul-Sep 2012    | N/A                           | N/A                        |
| To date in 2012 | 79                            | 79                         |

### **Quarterly GeneXpert Report**

Country Mozambique

Period JULY-SEPTEMBER 2012

Table 1: TB CARE I-funded GeneXpert instruments and cartridges procured or planned by quarter

|                         |  | Procured |                          | # still planned                      | Month, Year |  |
|-------------------------|--|----------|--------------------------|--------------------------------------|-------------|--|
|                         | Jan-Dec 2011 Jan-Sept 2012 Cumulative Tota |          | for procurement in APA 2 | procurement planned (i.e. July 2012) |             |  |
| # GeneXpert Instruments | 3  |          | 3                        |                                      |             |  |
| # Cartridges            | 1500                                       |          | 1500                     |                                      |             |  |

Table 2: Cumulative List of Genexpert Instruments Procured to Date or Planned in the Next Quarter

| Already<br>procured or still<br>planned? (i.e.<br>Write<br>"Procured" or<br>"Planned") | Instrument | # of Modules<br>(1, 2, 4, or 16) | Location(s)<br>(facility name &<br>city/ province or<br>TBD) | USG Funding<br>Source (e.g.,<br>PEPFAR COP<br>FYxx, USAID) <sup>1</sup> | Partner/ Implementing Organization;<br>Additional Comments |
|--|------------|----------------------------------|--|---|--|
|  | 1          | _                                | Cuamba Rural   | 110475  | TD 0405 *  |
| Procured   |            | 4                                | Hospital, Niassa   | USAID   | TB CARE I  |
|  | 2          |                                  | Carmelitas   |   |  |
| Procured   |            | 4                                | Hospital, Chokwé   | USAID   | TB CARE I  |
|  | 3          |                                  | Quelimane<br>Provincial Hospital,                            |   |  |
| Procured   |            | 4                                | Zambézia   | USAID   | TB CARE I  |
|  | 4          |                                  |  |   |  |
|  | 5          |                                  |  |   |  |
|  | 6          |                                  |  |   |  |
| `  | 7          |                                  |  |   |  |
| ·-   | 8          |                                  |  |   |  |

<sup>&</sup>lt;sup>1</sup> Differentiating between PEPFAR and USAID-funded is important. If it is PEPFAR funded, specify the fiscal year (i.e. FY2011). Add rows if there are more than 8 instruments in total.

Table 3: Cumulative Xpert MTB/RIF Cartridges Procured to Date or Planned for Next Quarter

| Already<br>procured or still<br>planned? (i.e.<br>Write<br>"Procured" or<br>"Planned") | Order # | # of<br>Cartridges* | Location(s) (facility name and city/ province or TBD) | USG Funding<br>Source (e.g.,<br>PEPFAR COP<br>FYxx, USAID) <sup>1</sup> | Comments |
|--|---------|---------------------|---|---|----------|
|  | 1       |                     | Cuamba Rural  |   |          |
| Procured   |         | 500                 | Hospital, Niassa                                      | USAID   |          |
|  | 2       |                     | Carmelitas  |   |          |
| Procured   |         | 500                 | Hospital, Chokwé                                      | USAID   |          |
|  | 3       |                     | Quelimane<br>Provincial Hospital,                     |   |          |
| Procured   |         | 500                 | Zambézia  | USAID   |          |
|  | 4       |                     |   |   |          |
|  | 5       |                     |   |   |          |

| There are 10 cartridges per kit, but we need the total # of cartridges (not kits) |  |
|---|--|
| Add an additional row for every procurement order of cartridges                   |  |
| ·   |  |

| Any additional information/clarifications to the above (optional)  |
|--|
|  |
|  |
|  |
|  |
| Please provide a brief description of any significant problems encountered in use of the GeneXpert machine(s) and Xpert MTB/RIF cartridges |
|  |
|  |
|  |
| Please describe technical assistance or evaluation of implementation activities performed and planned.                                     |
|  |

#### Quarterly Photos (as well as tables, charts and other relevant materials)

Training of lab technicians in LED (New Technologies)



Rehabiliataion of the Pebane Rondavel for AFB Smear Microscopy performance







TB, TB/HIV, MDR TB and Pediatric TB Training for clinical partners closing ceremony



## **Inventory List of Equipment - TB CARE I**

| Organization:     | TB CARE I           |
|-------------------|---------------------|
| Country:          | Mozambique          |
| Reporting period: | July-September 2012 |
| Year:             | APA 2               |





| Description (1) | ID numbers<br>(2) | Acquisition date (3) | Acquisition cost (4) | V.A.T<br>(5) | Location<br>(6)       | Conditio n (7) | Disposition date (8) | Title held by (9) | Insurance Policy # |
|-----------------|-------------------|----------------------|----------------------|--------------|-----------------------|----------------|----------------------|-------------------|--------------------|
| Motorbikes      |                   | 23/05/12             | \$5.450,00           | \$926,00     | Tete                  | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5643289           | 23/05/12             | \$5.450,00           | \$926,00     | Tete                  | new            | June 2012            | FHI360            |                    |
| Motorbikes      |                   | 23/05/12             | \$5.450,00           | \$926,00     | Zambezia              | new            | June 2012            | FHI360            |                    |
| Motorbikes      |                   | 23/05/12             | \$5.450,00           | \$926,00     | Zambezia              | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5643275           | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      |                   | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5634272           | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      |                   | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5643290           | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5643262           | 23/05/12             | \$5.450,00           | \$926,00     | Nampula               | new            | June 2012            | FHI360            |                    |
| Motorbikes      | 5643266           | 23/05/12             | \$5.450,00           | \$926,00     | Gaza                  | new            | June 2012            | FHI360            |                    |
| GeneXpert       |                   | 22/06/12             | \$29.857,33          | N/A          | Chokwe/Gaza           | new            | June 2012            | МОН               |                    |
| GeneXpert       |                   | 22/06/12             | \$29.857,33          | N/A          | Quelimane/Zambezia    | new            | June 2012            | МОН               |                    |
| GeneXpert       |                   | 22/06/12             | \$29.857,33          | N/A          | Cuamba/Niassa         | new            | June 2012            | мон               |                    |
| LED Microscopy  |                   | June 2012            | \$4.016,25           | \$682,76     | HP Xai Xai/Gaza       | new            | August 2012          | МОН               |                    |
| LED Microscopy  |                   | June 2012            | \$4.016,25           | \$682,76     | HR de Chicumbane/Gaza | new            | August 2012          | МОН               |                    |

|                |                   |           |            |          | I                                    |     |             |     |
|----------------|-------------------|-----------|------------|----------|--------------------------------------|-----|-------------|-----|
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | C.S de Ponta Gea/Sofala              | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Nhamatanda/Sofala              | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Sussundega/Manica              | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Ulongue/Tete                   | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | C.D de Mutarara/Tete                 | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HP de Quelimane/Zambezia             | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Milange/Zambezia               | new | August 2012 | МОН |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Gurue/Zambezia                 | new | August 2012 | МОН |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HR de Mocuba/Zambezia                | new | August 2012 | МОН |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | Lab de Ref de TB/Nampula             | new | August 2012 | МОН |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | C.S de Carapira-Monapo/Na            | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HD de Moma/Nampula                   | new | August 2012 | мон |
| LED Microscopy | SN:<br>3134001261 | June 2012 | \$4.016,25 | \$682,76 | HR de Cuamba/Niassa                  | new | August 2012 | МОН |
| LED Microscopy |                   | June 2012 | \$4.016,25 | \$682,76 | HP de Lichinga                       | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 |          | Lab Nacional Referencia<br>TB/Maputo | new | August 2012 | мон |
| LED Microscopy |                   | June 2012 | \$4.016,25 |          | Hosp. Geral<br>Machava/Maputo        | new | August 2012 | мон |

- (1) Description of equipment: transportation (vehicles), administration (computers, faxes), laboratory equipment or others
- (2) Identification number (eg Manufacturer's serial number, model number, Federal stock number, national stock number)
- (3) Date of invoice
- (4) Total price including any sales tax paid. Use currency on invoice
- (5) Note any sales tax charged
- (6) Address
- (7) Good/fair or bad
- (8)+(9) Ultimate disposition data, (in the case of a vehicle) including date of disposal and sales price or the method used to determine current fair market value. where a recipient compensated TB CARE I for its share. Attach supplementary info